



## Specific recommendations for 2.3 GHz WCS auctions (cont'd)

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- Capacity could be provided on a "carriers' carrier" basis, or in other reasonable and nondiscriminatory manner
- Opportunities for small businesses and other designated entities to participate will exist, without need for special provisions in the auction rules

• Mechanisms for capacity sharing could take the form of market-driven purchase of capacity from the "infrastructure provider", not dissimilar to the "carriers' carrier" concept, although in this case the "infrastructure provider" could also be a retail service or content provider, either directly or through a subsidiary.

• The opportunity for small businesses and other designated entities to participate, both as sublicensees/franchisees of spectrum rights and as retail providers of products and services, will exist. There is no need to make special provisions for designated entities in the auction rules.



## Permitted Services

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- Commenters desire to provide a range of new services
  - Fixed and "temporary fixed" services for data and voice
  - Limited mobility (low -tier with no high-speed handoff)
- Regulatory proscription of full mobility may not be necessary

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### Permitted Services:

To the extent the Commission believes it is necessary to limit the range of permissible services, the allocation of this spectrum for fixed, temporary fixed and/or low-tier mobility services appears reasonable. There appears to be a significant interest in provision of voice and high speed data services, including wireless local loop and wireless Internet access.

Limiting the flexibility of the spectrum to these types of services/applications would be conducive to manufacturing efficiencies needed to make these services affordable to the general public.

\* This point was made by various manufacturers who responded to the NPRM (Alcatel, DSC, Lucent and Motorola).

\* The PCS auctions, both broadband and narrowband, have made ample spectrum available for mobility applications.

Limiting the permissible use to fixed or low-tier mobility services would also mitigate technical concerns such as spectrum sharing, interference, etc. and also promote domestic-international interoperability.

As a practical matter, such a limitation may not be necessary, if the broadband spectrum cap is preserved. In major metropolitan areas, the WCS licensee is likely to be the sixth (or even the ninth or tenth) broadband entrant. It is difficult to envision a viable business plan premised on "more of the same" high-tier mobility, far more likely is a more specialized (voice, data, or both) service with broad geographic coverage.

## Band Plan

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- Full 30 MHz needed to deliver ubiquitous, quality services
- Rough parity with CMRS bandwidth
- Fragmentation would risk making services non-viable

For the kind of services described, a full 30 MHz of spectrum, 15 MHz each way, appears to be the minimum bandwidth capable of delivering a wide range of digital services, from "wire-line" quality voice to high-speed Internet access.

\* Making 30 MHz available to a single licensee would also provide parity with the A, B, C PCS licensees, and rough parity with the cellular carriers.

\* Fragmenting the allocation into blocks as small as 10, 5, or even 1 MHz (as suggested by some commenters) would likely render the allocation largely unusable, especially if licensees were awarded for multiple geographic areas.



## Build-Out Requirements

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- If necessary at all, should be based on percentage of population served
- Given lack of technology development, extended buildout period should be available
- "Substantial service" requirement may be sufficient protection against warehousing

For a national license, the best (and perhaps only realistic) way to specify these requirements would be based on percentage of population served as a function of time.

It is important to bear in mind the unique practical constraints associated with this band; unlike PCS at 1900 MHz, there has been no opportunity for the "infrastructure" providers and equipment vendors to begin the process of developing and manufacturing equipment. It will take some time to design the hardware and make it available in quantity and, concurrently, to obtain financing needed to build the infrastructure.

At a minimum, there should be a requirement that "substantial service" be rendered to the public during the latter half of a ten year license term.



## License Eligibility

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- Exclude facilities-based providers in their respective service areas
- Public will derive benefit from opportunity to acquire services from additional facilities-based providers
- Incumbents have incentive to deny access to potential competitors or to marginalize the use of spectrum

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Promotion of facilities-based competition is important, to ensure that consumers have the broadest possible array of choices among service providers. For this reason, we recommend that those entities which already have facilities-based capability, either wired or wireless, be excluded from eligibility to bid (or to hold a "sublicense" or "franchise"), but only within their licensed/franchised service areas. Flexible geographic partitioning in this band (and in CMRS) will mean that no one is necessarily precluded from accessing spectrum needed to expand their service areas.

• Incumbent LECs and cable system operators have their own facilities-based capability, in the form of copper, coaxial cable and/or fiber

• Broadband CMRS licensees already possess, or can purchase via auction or in the secondary market, spectrum sufficient to meet their needs.

• There is no need for a rural LEC exemption, given their existing partitioning rights in the CMRS bands.

• None of the eligibility restrictions enumerated above would prevent any entity from participating as a service provider or content provider anywhere; the eligibility restrictions only affect the right to hold the license or otherwise exercise control over the spectrum.

Allowing these entities to hold licenses for more than 45 MHz of broadband spectrum -- existing cap -- would give them the means to control the pace of buildout, and to play infrastructures that supported products and services which were complementary to, not competitive with, their existing offerings.

The public interest is best served by the availability of facilities-based telecommunications and information services from a wide range of competing suppliers. Given the inherent scarcity of spectrum, rules which permit those who already control access into homes, business (and vehicles) to acquire control of additional spectrum would be contrary to the overall public interest.